



A subsidiary of Pinnacle West Capital Corporation

August 1, 2005

Douglas Eberhardt, Manager
CWA Standards and Permits Office
U.S. Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, CA 94105

RE: Four Corners Power Plant, 316(b) Proposal for Information Collection
Response to EPA's Comment Letter dated July 6, 2005

Dear Mr. Eberhardt,

Arizona Public Service Company (APS) Four Corners Generating Station (Four Corners) has reviewed your comments on the proposal for information collection (PIC) submitted on April 18, 2005. We are pleased to note that EPA is in agreement with the vast majority of elements proposed as part of Four Corners' compliance strategy. Your response raised three key questions, one regarding the compliance alternatives considered, the second about a compliance option (i.e. use of existing restoration credit) and the third related to sampling protocol. This letter is intended to address each of those questions.

Use of Compliance Alternative 1

Your response observes that APS did not include an evaluation of the Four Corners facility for compliance with flows commensurate with closed-cycle cooling in the PIC (compliance Alternative 1). APS firmly believes that the cooling water lake at Four Corner Power Plant (Morgan Lake) meets the definition of a closed-cycle recirculating system and as such meets the requirements of compliance Alternative 1.

The Phase II Rule's method for documentation of flows commensurate with a closed-cycle recirculating system (i.e. compliance with alternative 1) is the submittal of information described in 40 CFR §122.21(r)(2), (3), and (5). A facility applying for permit coverage under Alternative 1 need not prepare a PIC, as described in 40 CFR §125.94(i). Based on our review, the regulatory timing dictated by the 316(b) existing facility rule required facilities with active (not yet up for renewal) permits to submit a PIC and initiate data collection to complete the information gathering and document preparation in case the facility were determined not to qualify for having reduced flows commensurate with closed cycle cooling under Compliance Alternative 1. Based on this conclusion, Four Corners submitted the PIC for your review before we were able to apply for coverage under alternative 1. However, in the interest of conserving both EPA and APS resources, the Company agrees that making a timely final determination on this point should be the priority and APS requests that EPA make that determination.

The basis of the Phase II Rule is to require facilities to employ use of Best Technology Available (BTA) to minimize impacts to fish and shellfish as specified in Section 316(b) of the Clean Water Act (CWA). The Phase II Rule further considers facilities that employ use of closed cycle recirculating water systems to automatically be in compliance and avoid the Comprehensive Demonstration Study (CDS) information gathering and reporting requirements. The original design of the Four Corners Power Plant incorporated construction of a cooling water lake rather than use of once through cooling from the San Juan River in northwest New Mexico. The current facility is a five unit, coal-fired facility with a generation capacity of approximately 2,000 megawatts.

The design provides condenser cooling water by recirculating the cooling water within the cooling lake. A small (less than 50 million gallon per day (mgd)) intake structure pumps make-up water uphill a distance of over three miles to the facility's cooling lake. Intake structures for condenser cooling, as well as, a cooling water discharge are located within the cooling lake to accomplish the recirculation. Discharges from the cooling lake itself represent a small fraction of the intake water, and at times, such discharges are not required. The cooling water lake at this facility was constructed in the desert rather than in a water of the United States. Four Corners withdraws less than 50 mgd from the San Juan River. Thus the overall recirculating cooling water system minimizes impacts to the San Juan River and the cooling water lake should be considered BTA under Compliance Alternative 1.

APS recognizes that BTA under 316(b) is a unique technology standard only found in Section 316(b) of the CWA. Therefore the determination of Four Corners' compliance via a recirculating cooling water system is without implication to other aspects of the facility's NPDES permit. Pending EPA Region IX confirmation that Four Corners is compliant with alternative 1 based on the operation of a closed-cycle recirculating cooling system, APS will prepare the detailed description of the "technology" for EPA consistent with 40 CFR 122.21(r)(5) along with 122.21(r)(2) and (3). Also if EPA agrees that the constructed cooling lake complies with Alternative 1, APS requests that EPA disregard the PIC submittal.

Morgan Lake as an Existing Restoration Measure

EPA's PIC comments raise issues concerning APS's proposed consideration of Morgan Lake as eligible for credit in terms of existing restoration measures under Compliance Alternative 2. The Rule does expressly allow use of existing restoration measures under Compliance Alternative 2 and APS fully agrees that it would need to provide the information required at §125.95(b)(5)(iii) as part of the Restoration Plan. APS believes there are a number of important factors to consider regarding use of this compliance option.

APS believes there are a number of relevant considerations when establishing the ecological baseline. The licensing process necessary prior to construction of a facility such as Four Corners considers the issues relative to the public benefits of the project relative to the existing ecological benefits (i.e. ecological value of the existing desert ecosystem) versus the benefits of electric power generation that will result from the project. Four Corners and other facilities with cooling lakes always have the option of limiting use of the cooling lake to being part of the water and/or wastewater treatment system or for availability as a multi-use public resource. While many

facilities have chosen to exclude public use, APS' lease agreement has chosen to allow it at Four Corners. Morgan Lake was constructed by creating an earthen basin to hold cooling water in the desert. Since the lake was filled with cooling water from the San Juan River there would logically be some incidental introduction of aquatic organisms. However, since these species would be primarily adapted for life in a free flowing river rather than a lake, the populations and recreational fishing value in the Lake would be either non-existent or very limited.

The baseline condition from APS's point of view is a constructed lake as part of a wastewater treatment system. By choosing to make the resource available as a public resource it should be entitled to some consideration for credit. The second important factor to consider is whether or not actions are initiated to improve the resource as habitat for public use. In the case of Morgan Lake, APS' lease agreement allows fishery management by the Navajo Nation to make enhancements through stocking to promote the recreational fishing value of the Lake. It is these stocking enhancements of largemouth bass and catfish that have promoted Morgan Lake as a valued resource to the community that APS also believes qualify as credit as a restoration measure under the Rule. The bottom line being that the net credit should be viewed as the difference between conditions in Morgan Lake in the absence of designation for public use and a fishery management enhancement program and that of the current program. APS does not disagree with and is prepared to consider making additional improvements if necessary to further protect and promote the value of this resource. This point is not relevant should EPA concur with the Compliance Alternative 1 designation. However, if Four Corners is subject to the Rule APS wishes to continue discussions with EPA on use of restoration both in terms of existing credit as well as additional enhancements.

Sampling Protocol

With respect to your question regarding fish collection durations, we provide the following clarification. APS is committed to collect all fish impinged during each 24-hour sampling period. The Sampling Plan states that impinged fish will be collected from 6:00 until 18:00 as one sub-sample and from 18:00 to 6:00 (next calendar day) as a second sub-sample. In regard to your primary question, all fish are collected and included in the fish counts during all sub-sampling intervals using the methods detailed in the Sampling Plan. Since submittal of the PIC, APS has conducted several trail sampling events and several formal sampling events. This experience has led us to slightly modify the sampling plan to accommodate the unexpected effect debris loading had on the fish collection baskets. The sampling period has been further subdivided into four sub-samples per 24-hours (9:00 to 15:00; 15:00 to 21:00; 21:00 to 3:00 (next day); and 3:00 to 9:00). Again, all fish are collected during each sampling interval. APS is confident that you will find the change in collection intervals to support the depiction of diurnal variation adequately.

Based on the initial sampling events, APS believes it may be necessary to further subdivide the 24-hour sampling period to help in minimizing debris loading on the screens and collection baskets during select sampling periods. Any future subdivisions would occur within the four outlined time periods allowing the continued depiction of diurnal variation. If further subdivision is necessary the collection intervals will be noted as part of the data collection

record. APS is in the process of revising the Sampling Plan to reflect these changes and we will provide you with a copy promptly once it is completed.

We thank you for the detailed review of the submitted documents and your interest in helping support a flexible regulatory environment for Four Corners Power Plant. If you would like to further discuss either of these issues please contact either Eran Mahrer at (602)250-2154 or Carl Woolfolk at (505)598-8799.

Sincerely,

Handwritten signature in cursive script that reads "Richard L. Grimes for David Saliba".

David L. Saliba
Four Corners Plant Manager